UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/577,623	04/28/2006	Minerva Yeung	42P20899	9643
8791 7590 05/26/2009 BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP 1279 OAKMEAD PARKWAY SUNDAYAN E. CA 04095, 4040			EXAMINER	
			UTAMA, ROBERT J	
SUNN I VALE,	SUNNYVALE, CA 94085-4040		ART UNIT	PAPER NUMBER
			3715	
			MAIL DATE	DELIVERY MODE
			05/26/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Commence	10/577,623	YEUNG ET AL.				
Office Action Summary	Examiner	Art Unit				
	ROBERT J. UTAMA	3715				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 04/28	2//2006					
	/ <del></del>					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-34</u> is/are pending in the application.	4) Claim(s) 1-34 is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-34</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>28 April 2006</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
	_					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite				
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date <u>08/11/2006</u> .  5) Notice of Informal Patent Application 6) Other:						
· · · · · · · · · · · · · · · · · · ·						

Art Unit: 3715

#### **DETAILED ACTION**

## Drawings

1. The drawings are objected to because fig. 1, 5, 6 and 11 contain dark smudges and shadow that exclude certain detail from the drawing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 101

- 2. 35 U.S.C. 101 reads as follows:
  - Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
- 3. Claims 1-19 and 31-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-8 and 31-34 are rejected because the limitation of "client module", "server module" and "online client" seem directed to a data structure or computer program that is not embodied in a computer readable medium. Data

structures and computer program that is not claimed as embodied in a computer readable medium are considered to descriptive material and are non-statutory (see MPEP 2106.01).

Claims 9-14, 15-19 are rejected under 35 U.S.C 101 because the claimed method steps fail to provide sufficient tie with another statutory subject matter. In order to be considered patent eligible under 35 USC 101, a claimed process must contain a sufficient tie to a machine, article of manufacture or a composition of matter. *In re Comiskey*, 84 USPQ2d 1670 (Fed. Cir. 2007). In this case, the claimed invention does not have a sufficient tie to any machine, article of manufacture or a composition of matter.

### Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 9 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada US 2002/0160341,

Claim 9: The Yamada reference provides a teaching of playing a benchmark audio to a student via a computer device, wherein the benchmark studio comprises a sentence recited in a language to be learned by the student (see FIG. 3 S102 and paragraph 47-55); recording a recitation of the sentence in the language by the student (see FIG. 3 S104 and paragraph 47-55); evaluating the recitation of the sentence from the student and comparing the recitation of the sentence from the student with the benchmark studio (see FIG. 3 item S106 and paragraph 47-55) and comparing the recitation of the sentence from the student with the benchmark audio (see FIG. 3 item S108 and paragraph 47-55).

**Claim 20:** The Yamada reference provides teaching of a storage medium having a plurality of machine accessible wherein the instruction are executed by a processor, the instruction

Art Unit: 3715

provide for playing a benchmark audio to a student via a computing device wherein the benchmark audio comprises a sentence recited in a second language (see paragraph 80); ); recording a recitation of the sentence in the language by the student (see FIG. 3 S104 and paragraph 47-55); evaluating the recitation of the sentence from the student and comparing the recitation of the sentence from the student with the benchmark studio (see FIG. 3 item S106 and paragraph 47-55) and comparing the recitation of the sentence from the student with the benchmark audio (see FIG. 3 item S108 and paragraph 47-55).

# 6. Claims 15-18, 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Shpiro US 2002/0086269

Claim 15: The Shpiro reference provides a teaching of downloading an oral homework assignment from a server module to a client module to be distributed to a class of student for performing the oral homework assignment to a client computing device (see paragraph 30), enabling a each student to login to the client module to perform the oral homework module assignment (see paragraph 26). The Shpiro reference provides a teaching where the client module evaluates oral response from each student based on the homework assignment and provides feedback on the intonation of each word in the oral responses from each student (see paragraph 36).

**Claim 16:** The Shpiro reference provides a teaching of client module evaluation to the server module to enable a teacher having access to a server module to review the module evaluation and provide feedback to the student (see paragraph 29).

Claims 17 and 28: The Shpiro reference provides a teaching wherein the feedback on the intonation each word comprises of duration, stress and pitch for each word (see paragraph 36).

Claims 18 and 29: The Shpiro reference provides a teaching of uploading information regarding whether or not each student in the class has performed the oral homework assignment (see paragraph 30-31).

Application/Control Number: 10/577,623

Art Unit: 3715

Claim 26: The Shpiro reference provides a teaching of a storage medium having a plurality of machine accessible instruction, wherein when the instruction are executed by a processor, the instruction provide for downloading an oral homework assignment from a server module to client module to be distributed to a class of students for performing the oral homework assignment on a client computing device ( see paragraph 30-31); and enabling each student to login to the client module to perform the oral homework assignment (see paragraph 28-29); wherein the client module evaluates oral response based on the oral homework assignment and provides feedback on the pronunciation and intonation of each word in the oral response from each student (see paragraph 52-60).

Page 5

Claim 27: The Shpiro reference provides a teaching of uploading the client module to the server module to enable a teacher to enable a teacher having access to the server module to review the client module evaluation and provide feedback to the students (see paragraph 29).

Claim 31: The Shpiro reference provides a teaching of an online client having an oral language assignment to be learned by student (see paragraph 30-31); the online client coupled to a client computing device to enable student to login to the online client and perform the oral language assignment, wherein the online client provides a benchmark sentence in the language to the student, to record a recitation of a sentence from the student (see paragraph 28-29) and compare recitation of the sentence from the student, to compare the recitation of the sentence with the benchmark audio and to provide feedback to the student on the comparison (see paragraph 52-60).

**Claim 34:** The Shpiro reference provides a teaching of a second computing device, the second computing device having a web browser to enable a teacher to communicate with the online client, wherein the teacher, after reviewing the results of a comparison for a student, provides personalized feedback to the student via the online client (see paragraph 29).

Art Unit: 3715

#### Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-8, 19, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shpiro US 2002/0086269, in view of Yamada US 2002/0160341.

Claim 1: The Shpiro reference provides a teaching of a language tutor system comprising of a client module (see FIG 1 306) and a server module coupled to client module (see FIG 1 item 302) where the server module to download an oral language assignment to the client module to enable a student learning a language to login the client module and perform the oral language assignment (see paragraph 30). The Shpiro reference is silent if it included the teaching wherein the client module to provide a benchmark audio sentence language in the language to the student, record a recitation of the sentence from the student, evaluate the recitation of the sentence from the student, compare the recitation of the sentence with the benchmark audio and to provide feedback to the student on the comparison. However, the Yamada reference provides a teaching of teaching wherein the client module to provide a benchmark audio sentence language in the language to the student (see FIG. 3 S102 and paragraph 47-55), record a recitation of the sentence from the student, evaluate the recitation of the sentence from the student (see FIG. 3 S104 and paragraph 0047-55), compare the recitation of the sentence with the benchmark audio studio (see FIG. 3 item S106 and paragraph 0047-55) and to provide feedback to the student on the comparison (see FIG 1 S110 paragraph 47-55). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature wherein the client module to provide a benchmark audio sentence language in the language to the student, record a recitation of the sentence from the student, evaluate the recitation of the

Art Unit: 3715

sentence from the student, compare the recitation of the sentence with the benchmark audio and to provide feedback to the student on the comparison; as taught by Yamada; in order to provide a correct diagnostic of the user's speech production (see paragraph 12)

**Claim 2:** The Shpiro reference provides a teaching of a client computing device coupled to the client module, wherein the student communicates with the client module using the client computing device (see paragraph 28)

Claim 3: The Shpiro reference provide a teaching of a client computing device; the client computing device having a web-browser to enable the student the student to communicate with the server module (see paragraph 28). The Shpiro reference fails to provide a teaching of wherein the feedback form the comparison of the recitation of the sentence with benchmark audio is uploaded to provide a learning history of the student. However, the Yamada reference provides a teaching of wherein the feedback form the comparison of the recitation of the sentence with benchmark audio is uploaded to provide a learning history of the student (see paragraph 86). Therefore it would have been obvious to one of ordinary skilled in the art to include the feature of wherein the feedback form the comparison of the recitation of the sentence with benchmark audio is uploaded to provide a learning history of the student, as taught by Yamada, in order to provide a correct diagnostic of the user's speech production (see paragraph 12).

**Claim 4:** The Shpiro reference provides a teaching where the feedback from the comparison of the recitation of the sentence by the student by the student with the benchmark audio enables the teacher to customize oral language assignments for the student based on the student's weakness (see paragraph 29).

**Claim 5:** The Shpiro reference provides a teaching of a computing device having a web browser to enable the student a teacher to communicate with server module (see

**Claim 7 and 19:** The Shpiro reference provides a teaching of a computing device to enable a teacher to communicate with the server module (see paragraph 29 and FIG 1 item 308) and to

Art Unit: 3715

receive result of the oral language assignment (see paragraph 29). The Shpiro reference fails to provide a teaching of providing a learning history to the student and the teacher and to enable the teacher to provide feedback to the student on the result from the oral assignment. However, the Yamada reference provides a teaching of a learning history to the student and the teacher and to enable the teacher to provide feedback to the student on the result from the oral assignment (see paragraph 86). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of a teaching of a learning history to the student and the teacher and to enable the teacher to provide feedback to the student on the result from the oral assignment, as taught by Yamada, in order to provide a correct diagnostic of the user's speech production (see paragraph 12)

**Claim 8:** The Shpiro reference provide a teaching of having an evaluation of the student's pronunciation of each word in the sentence and each phoneme in the sentence (see paragraph 50) and evaluation of the intonation of each word in the sentence wherein the valuation of the intonation includes duration, stress and pitch (see paragraph 51).

Claim 30: The Shpiro reference fails to provide a teaching of uploading client module provide a learning history on each of the students wherein a learning history comprises of the client module evaluation for each sentence recited by the student from all oral homework assignment. However, the Yamada reference provides a teaching of uploading client module provide a learning history on each of the students wherein a learning history comprises of the client module evaluation for each sentence recited by the student from all oral homework assignment (see paragraph 86). Therefore it would have been obvious to one of ordinary skilled in the art to include the feature of wherein the feedback form the comparison of the recitation of the sentence with benchmark audio is uploaded to provide a learning history of the student, as taught by Yamada, in order to provide a correct diagnostic of the user's speech production (see paragraph 12).

Claim 32: The Shpiro reference provides a teaching of a storage device wherein the feedback from the comparison of the recitation of the sentence with the benchmark audio is stored on the storage device to provide a learning history for the student. However, the Yamada reference provide a teaching wherein the feedback from the comparison of the recitation of the sentence with the benchmark audio is stored on the storage device to provide a learning history for the student (see paragraph 86). Therefore it would have been obvious to one of ordinary skilled in the art to include the feature of wherein the feedback form the comparison of the recitation of the sentence with benchmark audio is uploaded to provide a learning history of the student, as taught by Yamada, in order to provide a correct diagnostic of the user's speech production (see paragraph 12).

Page 9

9. Claims 6 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shpiro US 2002/0086269, in view of Yamada US 2002/0160341 and in view of George US 5,978,648.

Claim 6: The Shpiro reference provides a teaching of web browser to enable a teacher to communicate with the server module (see paragraph 29). The Shpiro reference fails to provide a teaching where the server module comprised of a homework management module, homework management module to provide homework assignment to the student, the homework assignments including a homework task, a list of students to download the homework assignment to, a due date, a number of times the students is to complete the task, a minimum score for the homework assignment, and any comments from the teacher. However, the George reference provides a teaching of where the server module comprised of a homework management module (see col. 4:15-20), homework management module to provide homework assignment to the student (see 4:35-45), the homework assignments including a homework task (see FIG. 4 item 54), a list of students to download the homework assignment to (see col. 7:40-8:10), a due date (see FIG 11 item 168), a number of times the students is to complete the

Application/Control Number: 10/577,623

Art Unit: 3715

task, a minimum score for the homework assignment (see FIG 44), and any comments from the teacher (see FIG 11 item 186). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of server module comprised of a homework management module, homework management module to provide homework assignment to the student, the homework assignments including a homework task, a list of students to download the homework assignment to, a due date, a number of times the students is to complete the task, a minimum score for the homework assignment, and any comments from the teacher; as taught by George, in order to perform effective grading and assignment of class assignment (see paragraph 1:40-50)

Page 10

Claim 33: The Shpiro reference provides a teaching of a second computing device, the second computing device having a web browser to enable a teacher to communicate with the online client (see paragraph 28-29). The Shpiro reference fails to provide a teaching where the online client includes a homework management module, the homework management module enable the teacher to provide homework assignment to the student includes homework task, a list of students to download the homework assignment to, a due date, a number of times the students is to complete the task, a minimum score for the homework assignment, and any comments from the teacher. However, the George reference provide a teaching where the teaching where the online client includes a homework management module see col. 4:15-20), homework management module to provide homework assignment to the student (see 4:35-45), the homework assignments including a homework task (see FIG. 4 item 54), a list of students to download the homework assignment to (see col. 7:40-8:10), a due date (see FIG 11 item 168), a number of times the students is to complete the task, a minimum score for the homework assignment (see FIG 44), and any comments from the teacher (see FIG 11 item 186). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of server module comprised of a homework management module, homework management module to provide homework assignment to the student, the homework

Art Unit: 3715

assignments including a homework task, a list of students to download the homework assignment to, a due date, a number of times the students is to complete the task, a minimum score for the homework assignment, and any comments from the teacher; as taught by George, in order to perform effective grading and assignment of class assignment (see paragraph 1:40-50)

10. Claims 10-14 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada US 2002/0160341 in view of Shpiro US 2002/0086269.

Claims 10 and 21: The Yamada reference fail to provide a teaching of providing feedback on the comparison to the student and uploading the result of the comparison to server module to enable a teacher having access to the server to evaluate the results and provide personalized feedback to the student via web page. However, the Shpiro reference provides a teaching of feedback on the comparison to the student and uploading the result of the comparison to server module to enable a teacher having access to the server to evaluate the results and provide personalized feedback to the student via web page (see paragraph 29). Therefore, it would have been obvious to one of ordinary skilled in the art feedback on the comparison to the student and uploading the result of the comparison to server module to enable a teacher having access to the server to evaluate the results and provide personalized feedback to the student via web page, as taught by Shpiro, in order to provide an efficient language learning that is able to provide corrective feedback to the user (see paragraph 10-11).

Claims 11 and 22: The Yamada reference fails to provide a teaching of a feedback to the comparison to the student and uploading the results of the comparison to a server module provide a learning history to the student and teacher via webpage. However, the Shpiro reference provides a teaching of a feedback to the comparison to the student and uploading the results of the comparison to a server module provide a learning history to the student and teacher via webpage (see paragraph 29). Therefore it would have been obvious to one of

Art Unit: 3715

ordinary skilled in the art to include the feature of a feedback to the comparison to the student and uploading the results of the comparison to a server module provide a learning history to the student and teacher via webpage, as taught by Shpiro, in order to provide an efficient language learning that is able to provide corrective feedback to the user (see paragraph 10-11). Claim 12: The Yamada reference provide a teaching of matching text from the benchmark audio with the recitation of the sentence the student to separate the sentence into word and phoneme (see FIG. 3 S104 and paragraph 47-55)) and comparing the pronunciation of each word and phoneme by the student with the pronunciation of each word and phoneme from the benchmark audio (see FIG. 3 item S106 and paragraph 47-55). The Yamada reference fails to provide a teaching comparing the intonation of each word by the student with the intonation of each word from the benchmark audio. However, the Shpiro reference comparing the intonation of each word by the student with the intonation of each word from the benchmark audio (see Shpiro paragraph 51). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of comparing the intonation of each word by the student with the intonation of each word from the benchmark audio, as taught by Shpiro, in order to provide an efficient language learning that is able to provide corrective feedback to the user (see paragraph 10-11).

Claim 13: The Yamada fails to provide a teaching where the intonation of each word comprises duration, stress and pitch. However, the Shpiro reference provides a teaching where the intonation of each word comprises duration, stress and pitch (see paragraph 51). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of intonation of each word comprises duration, stress and pitch, as taught by Shpiro, in order to provide an efficient language learning that is able to provide corrective feedback to the user (see paragraph 10-11).

Art Unit: 3715

**Claim 14:** The Yamada reference provide a teaching of benchmark audio is downloaded from a server to client module and wherein the client module plays the benchmark audio to the student via the client computing device (see paragraph 30-31).

Claim 23: The Yamada reference provides a teaching of matching text from the benchmark audio with the recitation of the sentence by the student to separate the sentence into words and phonemes (see FIG. 3 S102 and paragraph 47-55); comparing the pronunciation of each word and phoneme by the student with the pronunciation of each word and phoneme from the benchmark audio (see FIG. 3 S108 and paragraph 47-55). The Yamada reference fails to provide a teaching of comparing the intonation of each word by the student with the intonation of each word from the benchmark audio. The Shpiro reference provides a teaching of comparing the intonation of each word by the student with the intonation of each word from the benchmark audio (see Shpiro paragraph 51). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of comparing the intonation of each word by the student with the intonation of each word by the student with the intonation of each word by the student with the intonation of each word by the student with the intonation of each word from the benchmark audio, as taught by Shpiro, in order to in order to provide an efficient language learning that is able to provide corrective feedback to the user (see paragraph 10-11).

Claim 24: The Yamada reference fails to provide a teaching wherein the intonation comprises duration, stress and pitch. However, the Shpiro reference provides a teaching where the intonation of each word comprises duration, stress and pitch (see paragraph 51). Therefore, it would have been obvious to one of ordinary skilled in the art to include the feature of intonation of each word comprises duration, stress and pitch, as taught by Shpiro, in order to provide an efficient language learning that is able to provide corrective feedback to the user (see paragraph 10-11).

Art Unit: 3715

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ROBERT J. UTAMA whose telephone number is (571)272-1676.

The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Xuan Thai can be reached on (571)272-7147. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert J Utama/

Examiner, Art Unit 3715

/XUAN M. THAI/

Supervisory Patent Examiner, Art Unit 3715